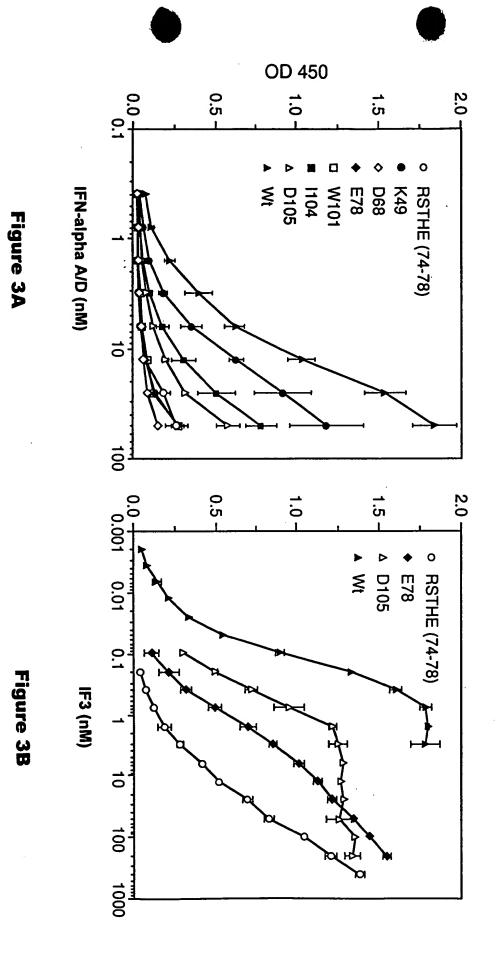
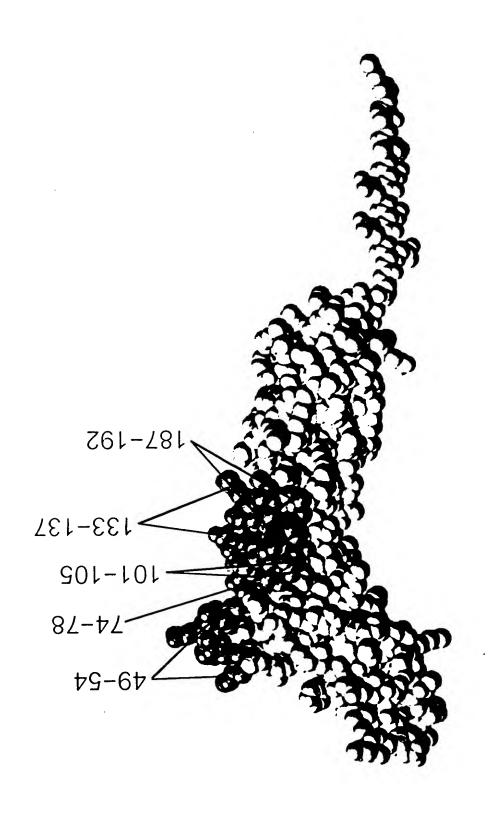


Figure 2

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1 GAATTCCTAA AAATAGCAAA GATGCTTTTG AGCCAGAATG CCTTCATCGT CAGATCACTT AATTTGGTTC TCATGGTGTA TATCAGCCTC GTGTTTGGTA CTTAAGGATT TTTATCGTTT CTACGAAAAC TCGGTCTTAC GGAAGTAGCA GTCTAGTGAA TTAAACCAAG AGTACCACAT ATAGTCGGAG CACAAACCAT

human alpha beta receptor

- 101 TTTCATATGA TTCGCCTGAT TACACAGATG AATCTTGCAC TTTCAAGATA TCATTGCGAA ATTTCCGGTC CATCTTATCA TGGGAATTAA AAAACCACTC AAAGTATACT AAGCGGACTA ATGTGTCTAC TTAGAACGTG AAAGTTCTAT AGTAACGCTT TAAAGGCCAG GTAGAATAGT SerTyrAs pSerProAsp TyrThrAspG luSerCysTh rPheLysIle SerLeuArgA snPheArgSe rIleLeuSer TrpGluLeuL ysAsnHisSer ACCCTTAATT TTTTGGTGAG
- 201 CATTGTACCA ACTCACTATA CATTGCTGTA TACAATCATG AGTAAACCAG AAGATTTGAA GGTGGTTAAG AACTGTGCAA ATACCACAAG ATCATTTTGT GTAACATGGT TGAGTGATAT GTAACGACAT ATGTTAGTAC TCATTTGGTC TTCTAAACTT CCACCAATTC IleValPro ThrHisTyrT hrLeuLeuTy rThrIleMet SerLysProG luAspLeuLy sValValLys AsnCysAlaA snThrThrAr gSerPheCys TTGACACGTT TATEGTETTC TAGTAAAACA

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- 301 GACCTCACAG ATGAGTGGAG AAGCACACAC GAGGCCTATG TCACCGTCCT AGAAGGATTC AGCGGGAACA CAACGTTGTT CAGTTGCTCA CACAATTTCT 83 AspLeuThrA spGluTrpAr gSerThrHis GluAlaTyrV alThrValLe uGluGlyPhe SerGlyAsnT hrThrLeuPh eSerCysSer HisAsnPheTrp CTGGAGTGTC TACTCACCTC TTCGTGTGTG CTCCGGATAC AGTGGCAGGA TCTTCCTAAG TCGCCCTTGT GTTGCAACAA GTCAACGAGT GTGTTAAAGA
- 102 401 GGCTGGCCAT AGACATGTCT TTTGAACCAC CAGAGTTTGA GATTGTTGGT TTTACCAACC ACATTAATGT GATGGTGAAA TTTCCATCTA TTGTTGAGGA CCGACCGGTA TCTGTACAGA AAACTTGGTG GTCTCAAACT CTAACAACCA AAATGGTTGG LeuAlaIl eAspMetSer PheGluProP roGluPheGl uIleValGly PheThrAsnH isIleAsnVa lMetValLys PheProSerI leValGluGlu TGTAATTACA CTACCACTTT AAAGGTAGAT AACAACTCCT
- 135 501 AGAATTACAG TTTGATTTAT CTCTCGTCAT TGAAGAACAG TCAGAGGGAA TTGTTAAGAA GCATAAACCC GAAATAAAAG GAAACATGAG TCTTAATGTC GluLeuGln PheAspLeuS erLeuValIl eGluGluGln SerGluGlyI leValLysLy sHisLysPro GluIleLysG lyAsnMetSe rGlyAsnPhe AAACTAAATA GAGAGCAGTA ACTTCTTGTC AGTCTCCCTT AACAATTCTT CGTATTTGGG CITTATITIC CTTTGTACTC TGGAAATTTC ACCTTTAAAG
- 601 ACCTATATCA TIGACAAGIT AATICCAAAC ACGAACTACI GIGTATCIGI TIATITAGAG CACAGIGAIG AGCAAGCAGI AATAAAGICI ThrTyrIleI leAspLysLe uIleProAsn ThrAsnTyrC ysValSerVa lTyrLeuGlu HisSerAspG luGlnAlaVa lIleLysSer ProLeuLysCys TGGATATAGT AACTGTTCAA TTAAGGTTTG TGCTTGATGA CACATAGACA AATAAATCTC GTGTCACTAC TCGTTCGTCA TTATTTCAGA CCCTTAAAAT GGGAATTTTA
- 202 701 GCACCCTCCT TCCACCTGGC CAGGAATCAG AATCAGCAGA ATCTGCCGAC AAAACTCACA CATGCCCACC GTGCCCAGCA CCTGAACTCC CGTGGGAGGA AGGTGGACCG GTCCTTAGTC ThrLeuLe uProProGly GlnGluSerG luSerAlaGl uSerAlaAsp LysThrHisT hrCysProPr oCysProAla ProGluLeuL euGlyGlyPro TTAGTCGTCT TAGACGGCTG TTTTGAGTGT GTACGGGTGG CACGGGTCGT GGACTTGAGG ACCCCCCTGG TGGGGGGACC
- 235 108 GTCAGTCTTC CAGTCAGAAG SerValPhe LeuPheProP roLysProLy sAspThrLeu MetIleSerA rgThrProGl uValThrCys ValValValA spValSerHi sGluAspPro GAGAAGGGGG GTTTTGGGTT CCTGTGGGAG CTCTTCCCCC CAAAACCCAA GGACACCCTC ATGATCTCCC GGACCCCTGA GGTCACATGC GTGGTGGTGG ACGTGAGCCA CGAAGACCCT TACTAGAGGG CCTGGGGACT CCAGTGTACG CACCACCACC TGCACTCGGT GCTTCTGGGA

Figure 5A

- 268 901 GAGGTCAAGT TCAACTGGTA CGTGGACGGC GTGGAGGTGC ATAATGCCAA GACAAAGCCG CGGGAGGAGC AGTACAACAG CACGTACCGA GTGGTCAGCG GluValLysP heAsnTrpTy rValAspGly ValGluValH isAsnAlaLy sThrLysPro ArgGluGluG lnTyrAsnSe rThrTyrArg ValValSerVal CTCCAGTTCA AGTTGACCAT GCACCTGCCG CACCTCCACG TATTACGGTT CTGTTTCGGC GCCCTCCTCG TCATGTTGTC GTGCATGGCT CACCAGTCGC
- 1001 302 TCCTCACCGT CCTGCACCAG AGGAGTGGCA LeuThrVa lLeuHisGln AspTrpLeuA snGlyLysGl uTyrLysCys LysValSerA snLysAlaLe uProAlaPro IleGluLysT hrIleSerLys GGACGTGGTC GACTGGCTGA ATGGCAAGGA GTACAAGTGC CTGACCGACT TACCGTTCCT CATGTTCACG TTCCAGAGGT TGTTTCGGGA GGGTCGGGGG TAGCTCTTTT AAGGTCTCCA ACAAAGCCCT CCCAGCCCCC ATCGAGAAAA CCATCTCCAA GGTAGAGGTT
- 1101 335 AGCCAAAGGG TCGGTTTCCC AlaLysGly GlnProArgG luProGlnVa lTyrThrLeu ProProSerA rgGluGluMe tThrLysAsn GlnValSerL euThrCysLe uValLysGly GTCGGGGCTC CAGCCCCGAG AACCACAGGT GTACACCCTG CCCCCATCCC TTGGTGTCCA CATGTGGGAC GGGGGTAGGG CCCTTCTCTA CTGGTTCTTG GTCCAGTCGG ACTGGACGGA CCAGTTTCCG GGGAAGAGAT GACCAAGAAC CAGGTCAGCC TGACCTGCCT GGTCAAAGGC
- 1201 368 PheTyrProS erAspIleAl aValGluTrp GluSerAsnG TTCTATCCCA GCGACATCGC CGTGGAGTGG GAGAGCAATG GGCAGCCGGA GAACAACTAC AAGACCACGC CTCCCGTGCT GGACTCCGAC GGCTCCTTCT AAGATAGGGT CGCTGTAGCG GCACCTCACC CTCTCGTTAC CCGTCGGCCT lyGlnProGl uAsnAsnTyr LysThrThrP roProValLe uAspSerAsp GlySerPhePhe CTTGTTGATG TTCTGGTGCG GAGGGCACGA CCTGAGGCTG CCGAGGAAGA
- 1301 402 TCCTCTACAG AGGAGATGTC LeuTyrSe rLysLeuThr ValAspLysS CAAGCTCACC GTGGACAAGA GCAGGTGGCA GCAGGGGAAC GTCTTCTCAT GCTCCGTGAT GCATGAGGCT CTGCACAACC ACTACACGCA GTTCGAGTGG CACCIGITCI erArgTrpGl nGlnGlyAsn ValPheSerC ysSerValMe tHisGluAla LeuHisAsnH isTyrThrGln CGTCCACCGT CGTCCCCTTG CAGAAGAGTA CGAGGCACTA CGTACTCCGA GACGTGTTGG TGATGTGCGT
- 1401 GAAGAGCCTC CTTCTCGGAG AGGGACAGAG TCCCTGTCTC CGGGTAAATG AGTGCGACGG CCCTAGAGTC GACCTGCAGA AGCTTAGAAC CGAGGGGCCG CCATGGCCCA ACTTGTTTAT GCCCATTTAC TCACGCTGCC GGGATCTCAG CTGGACGTCT TCGAATCTTG GCTCCCCGGC GGTACCGGGT TGAACAAATA
- 435 LysSerLeu SerLeuSerP roGlyLysOP * (SEQ ID NO.26)

sv40 early

- 1501 TGCAGCTTAT AATGGTTACA AATAAAGCAA TAGCATCACA AATTTCACAA ATAAAGCATT TTTTTCACTG CATTCTAGTT GTGGTTTGTC CAAACTCATC ACGTCGAATA TTACCAATGT TTATTTCGTT ATCGTAGTGT TTAAAGTGTT TATTTCGTAA AAAAAGTGAC GTAAGATCAA CACCAAACAG GTTTGAGTAG
- 1601 AATGTATCTT ATCATGTCTG GATCGATCGG GAATTAATTC GGCGCAGCAC CATGGCCTGA AATAACCTCT GAAAGAGGAA CTTGGTTAGG TACCTTCTGA TTACATAGAA TAGTACAGAC CTAGCTAGCC CTTAATTAAG CCGCGTCGTG GTACCGGACT TTATTGGAGA CTTTCTCCTT GAACCAATCC ATGGAAGACT sv40 origin
- 1701 GGCGGAAAGA ACCAGCTGTG GAATGTGTGT CAGTTAGGGT GTGGAAAGTC CCCAGGCTCC CCAGCAGGCA GAAGTATGCA AAGCATGCAT CTCAATTAGT CCGCCTTTCT TGGTCGACAC CTTACACACA GTCAATCCCA CACCTTTCAG GGGTCCGAGG GGTCGTCCGT CTTCATACGT TTCGTACGTA GAGTTAATCA
- 1801 CAGCAACCAG GTGTGGAAAG TCCCCAGGCT CCCCAGCAGG CAGAAGTATG CAAAGCATGC ATCTCAATTA GTCAGCAACC ATAGTCCCGC CCCTAACTCC GTCGTTGGTC CACACCTTTC AGGGGTCCGA GGGGTCGTCC GTCTTCATAC GTTTCGTACG TAGAGTTAAT CAGTCGTTGG TATCAGGGCG GGGATTGAGG

Figure 5B

- 2001 1901 GCCCATCCCG CCCCTAACTC CGCCCAGTTC CGCCCATTCT CCGCCCCATG GCTGACTAAT TTTTTTATT TATGCAGAGG CCGAGGCCGC GAGCTATTCC AGAAGTAGTG AGGAGGCTTT TTTGGAGGCC TAGGCTTTTG CAAAAAGCTG TTAACAGCTT GGCACTGGCC GTCGTTTTAC AACGTCGTGA CTCGATAAGG TCTTCATCAC TCCTCCGAAA AAACCTCCGG ATCCGAAAAC GTTTTTCGAC AATTGTCGAA CCGTGACCGG CAGCAAAATG TTGCAGCACT CGGGTAGGGC GGGGATTGAG GCGGGTCAAG GCGGGTAAGA GGCGGGGTAC CGACTGATTA AAAAAAATAA ATACGTCTCC GGCTCCGGCG GAGCCGGAGA CICGCCCICI
- 2101 CTGGGAAAAC CCTGGCGTTA CCCAACTTAA TCGCCTTGCA GCACATCCCC CCTTCGCCAG CTGGCGTAAT AGCGAAGAGG CCCGCACCGA GACCCTTTTG GGACCGCAAT GGGTTGAATT AGCGGAACGT CGTGTAGGGG GGAAGCGGTC GACCGCATTA TCGCTTCTCC GGGCGTGGCT AGCGGGAAGG start pUC118 TCGCCCTTCC
- CAACAGTTGC GTAGCCTGAA TGGCGAATGG CGCCTGATGC GGTATTTTCT CCTTACGCAT CTGTGCGGTA TTTCACACCG CATACGTCAA AGCAACCATA GTTGTCAACG CATCGGACTT ACCGCTTACC GCGGACTACG CCATAAAAGA GGAATGCGTA GACACGCCAT AAAGTGTGGC GTATGCAGTT TCGTTGGTAI
- 2301 GTACGCGCCC TGTAGCGGCG CATTAAGCGC GGCGGGTGTG GTGGTTACGC GCAGCGTGAC CGCTACACTT GCCAGCGCCC TAGCGCCCCGC TCCTTTCGCT CATGCGCGGG ACATCGCCGC GTAATTCGCG CCGCCCACAC CACCAATGCG CGTCGCACTG GCGATGTGAA CGGTCGCGGG ATCGCGGGCG

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- 2401 TICTICCCIT CCTITCTCGC CACGTTCGCC GGCTTTCCCC **AAGAAGGGAA** GGAAAGAGCG GTGCAAGCGG CCGAAAGGGG CAGTTCGAGA TTTAGCCCCCC GAGGGAAATC CCAAGGCTAA ATCACGAAAT GCCGTGGAGC GTCAAGCTCT AAATCGGGGG CTCCCTTTAG GGTTCCGATT TAGTGCTTTA CGGCACCTCG
- 2501 ACCCCAAAAA ACTTGATTTG GGTGATGGTT CACGTAGTGG GCCATCGCCC TGATAGACGG TTTTCGCCC TTTGACGTTG GAGTCCACGT TCTTTAATAG TGGGGTTTTT TGAACTAAAC CCACTACCAA GTGCATCACC CGGTAGCGGG ACTATCTGCC AAAAAGCGGG AAACTGCAAC CTCAGGTGCA AGAAATTATC
- 2601 TGGACTCTTG ACCTGAGAAC TTCCAAACTG GAACAACACT CAACCCTATC TCGGGCTATT CTTTTGATTT ATAAGGGATT TTGCCGATTT CGGCCTATTG GTTAAAAAAT AAGGTTTGAC CTTGTTGTGA GTTGGGATAG AGCCCGATAA GAAAACTAAA TATTCCCTAA AACGGCTAAA GCCGGATAAC CAATTTTTT
- 2701 GAGCTGATTT AACAAAAATT TAACGCGAAT TTTAACAAAA TATTAACGTT TACAATTTTA TGGTGCACTC TCAGTACAAT CTGCTCTGAT GCCGCATAGT TAAGCCAACT CCGCTATCGC TACGTGACTG CTCGACTAAA TTGTTTTTAA ATTGCGCTTA AAATTGTTTT ATAATTGCAA ATGTTAAAAT GGTCATGGCT GCGCCCCGAC ACCCGCCAAC ACCCGCTGAC GCGCCCTGAC GGGCTTGTCT GCTCCCGGCA ACCACGTGAG AGTCATGTTA GACGAGACTA CGGCGTATCA

ATTCGGTTGA GGCGATAGCG ATGCACTGAC CCAGTACCGA CGCGGGGCTG TGGGCGGTTG TGGGCGACTG CGCGGGACTG CCCGAACAGA CGAGGGCCGT

- 2901 TCCGCTTACA GACAAGCTGT GACCGTCTCC GGGAGCTGCA TGTGTCAGAG GTTTTCACCG TCATCACCGA AACGCGCGAG GCAGTATTCT AGGCGAATGT CTGTTCGACA CTGGCAGAGG CCCTCGACGT ACACAGTCTC CAAAAGTGGC AGTAGTGGCT TTGCGCGCTC CGTCATAAGA ACTTCTGCTT TGAAGACGAA
- 3001 AGGGCCTCGT GATACGCCTA TTTTTATAGG TTAATGTCAT GATAATAATG GTTTCTTAGA CGTCAGGTGG CACTTTTCGG GGAAATGTGC GCGGAACCCC TCCCGGAGCA CTATGCGGAT AAAAATATCC AATTACAGTA CTATTATTAC CAAAGAATCT GCAGTCCACC GTGAAAAGCC CCTTTACACG CGCCTTGGGG

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GAGCGCAGAT	ATCTGCTGCT	CATGACCAAA	GGTAACTGTC	CCCTCCCGTA	GCGCTCGGCC	CAACGTTGCG	ATGGGGGATC	ATTATGCAGT	AAGAGCAACT	AAGATCCTTG	TCCTGTTTTT	AATAACCCTG
CTCGCGTCTA	TAGACGACGA	GTACTGGTTT	CCATTGACAG	GGGAGGGCAT	CGCGAGCCGG	GTTGCAACGC	TACCCCCTAG	TAATACGTCA	TTCTCGTTGA	TTCTAGGAAC	AGGACAAAAA	TTATTGGGAC
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TGGTTTATGA	ACGTTTGTTT	TAGGGAATTG	TCTGGTTCAA	AGCATCAATA	GAAGGCCGAC	GTTTGATAAT	TACATTGAGC	CGACGGTATT		TCTCAAAAGC	CGAGTGGGTC TTTGCGACCA	TATTTACGAA
GTCCTTCTAG	AAAACCACCG	GTGAGTTTTC	TACTCATATA	CTACACGACG	GCTGGTTTAT TGCTGATAAA	ACTGGCGAAC	CCTTGATCGT	CCATGAGTGA	ATACACTATT	CCCCGAAGAA		ATAAATGCTT CAATAATATT GAAAAAGGAA
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TGTAGCCGTA	CTACCAGCGG	GTTCCACTGA	TACTTTAGAT	GGGAGTCAGG		TACTTACTCT	TGGGAACCGG	TAACACTGCG	CTCAGAATGA	CGTTTTCCAA	GAAAGTAAAA	GAAAAAGGAA
ACATCGGCAT	GATGGTCGCC	CAAGGTGACT	ATGAAATCTA	CCCTCAGTCC		ATGAATGAGA	ACCCTTGGCC	ATTGTGACGC	GAGTCTTACT	GCAAAAGGTT	CTTTCATTTT	CTTTTTCCTT
GTTAGGCCAC	TGGTTTGTTT	GCGTCAGACC	TGATTTAAAA	CAACTATGGA	TCTGGAGCCG	AGCTTCCCGG	AGCTGAATGA	GCCAACTTAC	CTTGGTTGAG	TGATGAGCAC	GATGCTGAAG	GAGTATGAGT
CAATCCGGTG	ACCAAACAAA	CGCAGTCTGG	ACTAAATTTT	GTTGATACCT	AGACCTCGGC	TCGAAGGGCC	TCGACTTACT	CGGTTGAATG	GAACCAACTC	ACTACTCGTG	CTACGACTTC	CTCATACTCA

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- 4401 CACTTCAAGA ACTCTGTAGC ACCGCCTACA TACCTCGCTC TGCTAATCCT GTTACCAGTG GCTGCCCA GTGGCGATAA GTCGTGTCTT ACCGGGTTGG GTGAAGTTCT TGAGACATCG TGGCGGATGT ATGGAGCGAG ACGATTAGGA CAATGGTCAC CGACGACGGT CACCGCTATT CAGCACAGAA TGGCCCAACC
- 4501 ACTCAAGACG ATAGTTACCG GATAAGGCGC AGCGGTCGGG CTGAACGGGG GGTTCGTGCA CACAGCCCAG CTTGGAGCGA ACGACCTACA TGAGTTCTGC TATCAATGGC CTATTCCGCG TCGCCAGCCC GACTTGCCCC CCAAGCACGT GTGTCGGGTC GAACCTCGCT TGCTGGATGT GGCTTGACTC CCGAACTGAG
- 4601 ATACCTACAG CGTGAGCATT GAGAAAGCGC CACGCTTCCC GAAGGGAGAA AGGCGGACAG GTATCCGGTA AGCGGCAGGG TCGGAACAGG AGAGCGCACG TATGGATGTC GCACTCGTAA CTCTTTCGCG GTGCGAAGGG CTTCCCTCTT TCCGCCTGTC CATAGGCCAT TCGCCGTCCC AGCCTTGTCC TCTCGCGTGC
- 4701 AGGGAGCTTC CAGGGGGAAA CGCCTGGTAT CTTTATAGTC CTGTCGGGTT TCGCCACCTC TGACTTGAGC GTCGATTTTT GTGATGCTCG TCCCTCGAAG GTCCCCCTTT GCGGACCATA GAAATATCAG GACAGCCCAA AGCGGTGGAG ACTGAACTCG CAGCTAAAAA CACTACGAGC AGTCCCCCCG TCAGGGGGGC
- GGAGCCTATG GAAAAACGCC AGCAACGCGG CCTTTTTACG GTTCCTGGCC CCTCGGATAC CTTTTTGCGG TCGTTGCGCC GGAAAAATGC CAAGGACCGG AAAACGACCG GAAAACGAGT GTACAAGAAA GGACGCAATA GGGGACTAAG TTTTGCTGGC CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCCTGATTC

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- 4901 TGTGGATAAC CGTATTACCG CCTTTGAGTG AGCTGATACC GCTCGCCGCA GCCGAACGAC CGAGCGCAGC GAGTCAGTGA GCGAGGAAGC ACACCTATTG GCATAATGGC GGAAACTCAC TCGACTATGG CGAGCGGCGT CGGCTTGCTG GCTCGCGTCG CTCAGTCACT CGCTCCTTCG CCTTCTCGCG GGAAGAGCGC
- 5001 GGTTATGCGT
- 5101 TTAATGTGAG TTACCTCACT CATTAGGCAC CCCAGGCTTT ACACTTTATG CTTCCGGCTC GTATGTTGTG TGGAATTGTG AGCGGATAAC AATTTCACAC AATTACACTC AATGGAGTGA GTAATCCGTG GGGTCCGAAA TGTGAAATAC GAAGGCCGAG CATACAACAC ACCTTAACAC TCGCCTATTG TTAAAGTGTG
- 5201 AGGAAACAGC TATGACCATG ATTACGAATT AATTCGAGCT CGCCCGACAT TGATTATTGA CTAGTTATTA ATAGTAATCA ATTACGGGGT CATTAGTTCA TCCTTTGTCG ATACTGGTAC TAATGCTTAA TTAAGCTCGA GCGGGCTGTA ACTAATAACT GATCAATAAT TATCATTAGT TAATGCCCCA from pPMLCMV beginning to HindIII, enhancers and promoter GTAATCAAGT
- TAGCCCATAT ATGGAGTTCC GCGTTACATA ACTTACGGTA AATGGCCCGC CTGGCTGACC GCCCAACGAC CCCCGCCCAT TGACGTCAAT AATGACGTAT ATCGGGTATA TACCTCAAGG CGCAATGTAT TGAATGCCAT TTACCGGGCG GACCGACTGG CGGGTTGCTG GGGGCGGGTA ACTGCAGTTA TTACTGCATA
- 5401 GTTCCCATAG TAACGCCAAT AGGGACTTTC CATTGACGTC AATGGGTGGA GTATTTACGG TAAACTGCCC ACTTGGCAGT ACATCAAGTG TATCATATGC ATTGCGGTTA TCCCTGAAAG GTAACTGCAG TTACCCACCT CATAAATGCC ATTTGACGGG TGAACCGTCA TGTAGTTCAC ATAGTATACG
- 5501 CAAGTACGCC CCCTATTGAC GTCAATGACG GTAAATGGCC CGCCTGGCAT TATGCCCCAGT ACATGACCTT ATGGGACTTT CCTACTTGGC AGTACATCTA GTTCATGCGG GGGATAACTG CAGTTACTGC CATTTACCGG GCGGACCGTA ATACGGGTCA TGTACTGGAA TACCCTGAAA GGATGAACCG TCATGTAGAT

Figure 5E

5901 CCGATCCAGC CTCCGCGGCC GGGAACGGTG CATTGGAACG CGGATTCCCC GTGCCAAGAG TGACGTAAGT ACCGCCTATA GAGTCTATAG GCCCACCCCC 5801 TACGGTGGGA GGTCTATATA AGCAGAGCTC GTTTAGTGAA CCGTCAGATC GCCTGGAGAC GCCATCCACG CTGTTTTGAC CTCCATAGAA GACACCGGGA 5701 ATTGACGTCA ATGGGAGTTT GTTTTGGCAC CAAAATCAAC GGGACTTTCC AAAATGTCGT AACAACTCCG CCCCATTGAC GCAAATGGGC GGTAGGCGTG 5601 CGTATTAGTC ATCGCTATTA CCATGGTGAT GCGGTTTTGG CAGTACATCA ATGGGCGTGG ATAGCGGTTT GACTCACGGG GATTTCCAAG TCTCCACCCC TIGGCICGIT AGAACGCGGC TACAATTAAT ACATAACCIT AIGTAICATA CACATACGAI TIAGGIGACA CIATAGAATA ACATCCACIT IGCCITICIC GCATAATCAG TAGCGATAAT GGTACCACTA CGCCAAAACC GTCATGTAGT TACCCGCACC TATCGCCAAA CTGAGTGCCC CTAAAGGTTC AGAGGTGGGG AACCGAGCAA TCTTGCGCCG ATGTTAATTA TGTATTGGAA TACATAGTAT GTGTATGCTA AATCCACTGT GATATCTTAT TGTAGGTGAA ACGGAAAGAG GGCTAGGTCG GAGGCGCCGG CCCTTGCCAC GTAACCTTGC GCCTAAGGGG CACGGTTCTC ACTGCATTCA TGGCGGATAT CTCAGATATC ATGCCACCCT CCAGATATAT TCGTCTCGAG CAAATCACTT GGCAGTCTAG CGGACCTCTG CGGTAGGTGC GACAAAACTG GAGGTATCTT CTGTGGCCCT TAACTGCAGT TACCCTCAAA CAAAACCGTG GTTTTAGTTG CCCTGAAAGG TTTTACAGCA TTGTTGAGGC GGGGTAACTG CGTTTACCCG CCATCCGCAC CGGGTGGGG

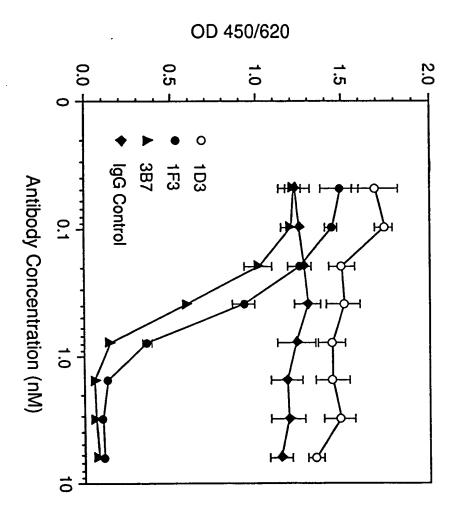
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6101 TCCACAGGTG TCCACTCCCA GGTCCAACTG CAGGCCATGG CGGCCATCGA AGGTGTCCAC AGGTGAGGGT CCAGGTTGAC GTCCGGTACC GCCGGTAGCT AA cloning linker TT (SEQ ID NO.25)

sp6 promoter

sp6 RNA start

Figure 1



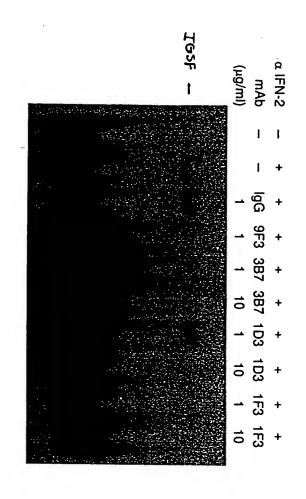
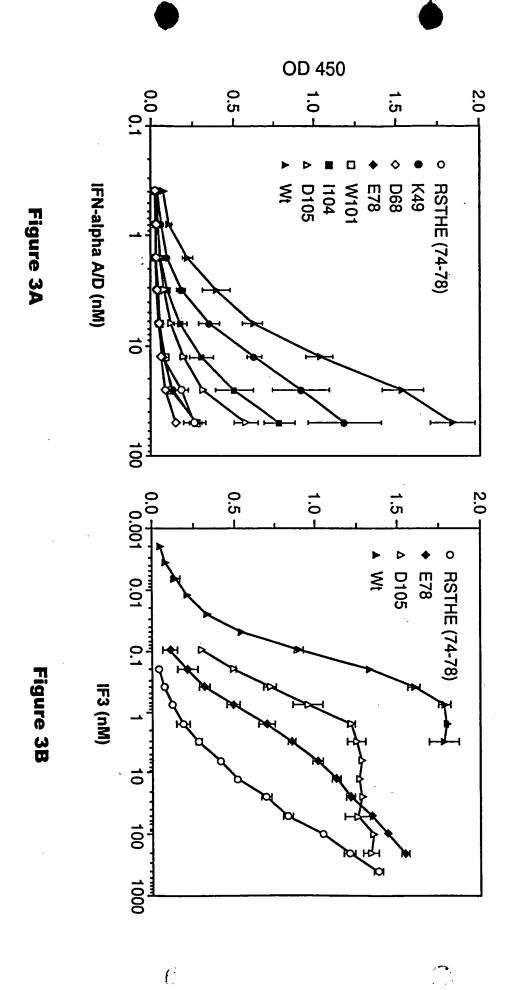


Figure 2



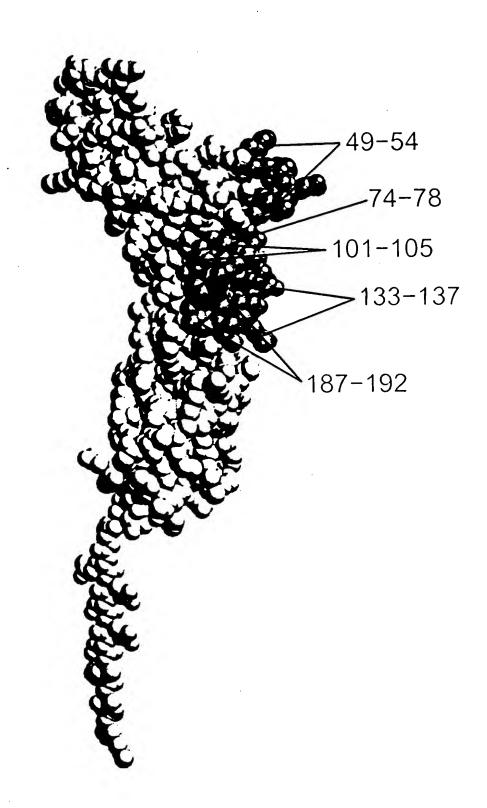


Figure 4

1 GAATTCCTAA AAATAGCAAA GATGCTTTTG AGCCAGAATG CCTTCATCGT CAGATCACTT AATTTGGTTC TCATGGTGTA TATCAGCCTC GTGTTTGGTA CITAAGGATT TITATCGTTT CTACGAAAAC TCGGTCTTAC GGAAGTAGCA GTCTAGTGAA TTAAACCAAG AGTACCACAT ATAGTCGGAG CACAAACCAT

human alpha beta receptor

- 101 TTTCATATGA TTCGCCTGAT TACACAGATG AATCTTGCAC TTTCAAGATA TCATTGCGAA ATTTCCGGTC CATCTTATCA TGGGAATTAA AAAACCACTC AAAGTATACT AAGCGGACTA ATGTGTCTAC TTAGAACGTG AAAGTTCTAT AGTAACGCTT TAAAGGCCAG GTAGAATAGT ACCCTTAATT TTTTGGTGAG SerTyrAs pSerProAsp TyrThrAspG luSerCysTh rPheLysIle SerLeuArgA snPheArgSe rIleLeuSer TrpGluLeuL ysAsnHisSer
- 201 CATTGTACCA ACTCACTATA CATTGCTGTA TACAATCATG AGTAAACCAG AAGATTTGAA GGTGGTTAAG AACTGTGCAA ATACCACAAG ATCATTTTGT GTAACATGGT TGAGTGATAT GTAACGACAT ATGTTAGTAC TCATTTGGTC TTCTAAACTT IleValPro ThrHisTyrT hrLeuLeuTy rThrIleMet SerLysProG luAspLeuLy sValValLys AsnCysAlaA snThrThrAr gSerPheCys CCACCAATTC TTGACACGTT TATGGTGTTC TAGTAAAACA

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- 301 GACCTCACAG ATGAGTGGAG AAGCACACAC GAGGCCTATG TCACCGTCCT AGAAGGATTC AGCGGGAACA CAACGTTGTT CAGTTGCTCA CACAATTTCT 80 AspLeuThrA spGluTrpAr gSerThrHis GluAlaTyrV alThrValLe uGluGlyPhe SerGlyAsnT hrThrLeuPh eSerCysSer HisAsnPheTrp CTGGAGTGTC TACTCACCTC TTCGTGTGTG CTCCGGATAC AGTGGCAGGA TCTTCCTAAG TCGCCCTTGT GTTGCAACAA GTCAACGAGT GTGTTAAAGA
- 102 401 GGCTGGCCAT AGACATGTCT TTTGAACCAC CAGAGTTTGA GATTGTTGGT TTTACCAACC ACATTAATGT GATGGTGAAA TTTCCATCTA CCGACCGGTA TCTGTACAGA AAACTTGGTG GTCTCAAACT LeuAlaIl eAspMetSer PheGluProP roGluPheGl uIleValGly PheThrAsnH isIleAsnVa lMetValLys PheProSerI leValGluGlu CTAACAACCA AAATGGTTGG TGTAATTACA CTACCACTTT AAAGGTAGAT AACAACTCCT TTGTTGAGGA
- 135 501 AGAATTACAG TTTGATTTAT CTCTCGTCAT TGAAGAACAG TCAGAGGGAA TTGTTAAGAA GCATAAACCC GAAATAAAAG GAAACATGAG TCTTAATGTC AAACTAAATA GAGAGCAGTA ACTTCTTGTC AGTCTCCCTT AACAATTCTT CGTATTTGGG GluLeuGln PheAspLeuS erLeuValIl eGluGluGln SerGluGlyI leValLysLy sHisLysPro GluIleLysG lyAsnMetSe rGlyAsnPhe CTITATTTC CTTTGTACTC ACCTTTAAAG TGGAAATTTC
- 601 ACCTATATCA TTGACAAGTT AATTCCAAAC ACGAACTACT GTGTATCTGT TTATTTAGAG CACAGTGATG AGCAAGCAGT AATAAAGTCT ThrTyrIleI leAspLysLe uIleProAsn ThrAsnTyrC ysValSerVa lTyrLeuGlu HisSerAspG luGlnAlaVa lIleLysSer ProLeuLysCys TGGATATAGT AACTGTTCAA TTAAGGTTTG TGCTTGATGA CACATAGACA AATAAATCTC GTGTCACTAC TCGTTCGTCA TTATTTCAGA CCCTTAAAAT GGGAATTTTA
- 202 701 GCACCCTCCT TCCACCTGGC CAGGAATCAG AATCAGCAGA ATCTGCCGAC AAAACTCACA CATGCCCACC GTGCCCAGCA CCTGAACTCC TGGGGGGACC CGTGGGAGGA AGGTGGACCG GTCCTTAGTC ThrLeuLe uProProGly GlnGluSerG luSerAlaGl uSerAlaAsp LysThrHisT hrCysProPr oCysProAla ProGluLeuL euGlyGlyPro TTAGTCGTCT TAGACGGCTG TTTTGAGTGT GTACGGGTGG CACGGGTCGT GGACTTGAGG IgG1 ACCCCCCTGG
- 235 801 GTCAGTCTTC SerValPhe LeuPheProP roLysProLy sAspThrLeu MetIleSerA rgThrProGl uValThrCys ValValValA spValSerHi sGluAspPro GAGAAGGGGG GTTTTGGGTT CCTGTGGGAG TACTAGAGGG CCTGGGGGACT CCAGTGTACG CACCACCACC TGCACTCGGT GCTTCTGGGA CTCTTCCCCC CAAAACCCAA GGACACCCTC ATGATCTCCC GGACCCCTGA GGTCACATGC GTGGTGGTGG ACGTGAGCCA CGAAGACCCCT

Figure 5A

- 901 268 GAGGTCAAGT TCAACTGGTA CGTGGACGGC GTGGAGGTGC ATAATGCCAA GACAAAGCCG CGGGAGGAGC AGTACAACAG CACGTACCGA GTGGTCAGCG GluValLysP heAsnTrpTy rValAspGly ValGluValH isAsnAlaLy sThrLysPro ArgGluGluG lnTyrAsnSe rThrTyrArg ValValSerVal CTCCAGTTCA AGTTGACCAT GCACCTGCCG CACCTCCACG TATTACGGTT CTGTTTCGGC GCCCTCCTCG TCATGTTGTC GTGCATGGCT
- 1001 TCCTCACCGT CCTGCACCAG GACTGGCTGA ATGGCAAGGA GTACAAGTGC AAGGTCTCCA ACAAAGCCCT CCCAGCCCCC ATCGAGAAAA CCATCTCCAA TTCCAGAGGT TGTTTCGGGA GGGTCGGGGG TAGCTCTTTT GGTAGAGGTT
- 302 AGGAGTGGCA LeuThrVa lLeuHisGln AspTrpLeuA snGlyLysGl uTyrLysCys LysValSerA snLysAlaLe uProAlaPro IleGluLysT hrIleSerLys GGACGTGGTC CTGACCGACT TACCGTTCCT CATGTTCACG
- 1101 .335 AGCCABAGGG CAGCCCCGAG AACCACAGGT GTACACCCTG CCCCCATCCC GGGAAGAAGT GACCAAGAAC CAGGTCAGCC TGACCTGCCT GGTCAAAGGC TCGGTTTCCC AlaLysGly GlnProArgG luProGlnVa lTyrThrLeu ProProSerA rgGluGluMe tThrLysAsn GlnValSerL euThrCysLe uValLysGly GTCGGGGCTC TTGGTGTCCA CATGTGGGAC GGGGGTAGGG CCCTTCTCTA CTGGTTCTTG GTCCAGTCGG ACTGGACGGA CCAGTTTCCG
- 201 PheTyrProS erAspIleAl aValGluTrp GluSerAsnG lyGlnProGl uAsnAsnTyr LysThrThrP roProValLe uAspSerAsp GlySerPhePhe TTCTATCCCA GCGACATCGC CGTGGAGTGG GAGAGCAATG GGCAGCCGGA GAACAACTAC AAGACCACGC CTCCCGTGCT GGACTCCGAC GGCTCCTTCT **AAGATAGGGT** CGCTGTAGCG GCACCTCACC CTCTCGTTAC CCGTCGGCCT CTTGTTGATG TTCTGGTGCG GAGGGCACGA CCTGAGGCTG CCGAGGAAGA
- 1301 402 TCCTCTACAG CAAGCTCACC GTGGACAAGA GCAGGTGGCA GCAGGGGAAC GTCTTCTCAT GCTCCGTGAT GCATGAGGCT CTGCACAACC ACTACACGCA AGGAGATGTC LeuTyrSe rLysLeuThr ValAspLysS GTTCGAGTGG CACCTGTTCT erArgTrpGl nGlnGlyAsn ValPheSerC ysSerValMe tHisGluAla LeuHisAsnH isTyrThrGln CGTCCACCGT CGTCCCCTTG CAGAAGAGTA CGAGGCACTA CGTACTCCGA GACGTGTTGG TGATGTGCGT
- 1401 GAAGAGCCTC CTTCTCGGAG AGGGACAGAG GCCCATTTAC TCACGCTGCC GGGATCTCAG CTGGACGTCT TCGAATCTTG GCTCCCCGGC TCCCTGTCTC CGGGTAAATG AGTGCGACGG CCCTAGAGTC GACCTGCAGA AGCTTAGAAC CGAGGGGCCG CCATGGCCCA ACTTGTTTAT GGTACCGGGT TGAACAAATA
- 435 LysSerLeu SerLeuSerP roGlyLysOP * (SEQ ID NO.26)
- 1501 TGCAGCTTAT AATGGTTACA AATAAAGCAA TAGCATCACA AATTTCACAA ATAAAGCATT TTTTTCACTG CATTCTAGTT GTGGTTTGTC CAAACTCATC ACGTCGAATA TTACCAATGT TTATTTCGTT ATCGTAGTGT TTAAAGTGTT TATTTCGTAA AAAAAGTGAC GTAAGATCAA CACCAAACAG GTTTGAGTAG

poly A

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- Z601 AATGTATCTT ATCATGTCTG GATCGATCGG GAATTAATTC GGCGCAGCAC CATGGCCTGA AATAACCTCT GAAAGAGGAA CTTGGTTAGG TACCTTCTGA TTACATAGAA TAGTACAGAC CTAGCTAGCC CTTAATTAAG CCGCGTCGTG GTACCGGACT TTATTGGAGA CTTTCTCCTT GAACCAATCC ATGGAAGACT sv40 origin
- 1701 GGCGGAAAGA ACCAGCTGTG GAATGTGTGT CAGTTAGGGT GTGGAAAGTC CCCAGGCTCC CCAGCAGGCA GAAGTATGCA AAGCATGCAT CTCAATTAGT CCGCCTTTCT TGGTCGACAC CTTACACACA GTCAATCCCA CACCTTTCAG GGGTCCGAGG GGTCGTCCGT CTTCATACGT TTCGTACGTA GAGTTAATCA
- 1801 CAGCAACCAG GTGTGGAAAG TCCCCAGGCT CCCCAGCAGG CAGAAGTATG CAAAGCATGC ATCTCAATTA GTCAGCAACC ATAGTCCCGC CCCTAACTCC GTCGTTGGTC CACACCTTTC AGGGGTCCGA GGGGTCGTCC GTCTTCATAC GTTTCGTACG TAGAGTTAAT CAGTCGTTGG TATCAGGGCG GGGATTGAGG

Figure 5B

1901 GCCCATCCCG CCCCTAACTC CGCCCAGTTC CGCCCATTCT CCGCCCCATG GCTGACTAA IIIIIIAII IAIGCAGAGG CCGAGACTGAGGAC CGGCTAAGA CCCCCGAGGAGA CGGCGGAGAAAAAAAAAA	1901	190
CCCCTAACTC CGCCCAGTTC CGCCCATTCT CCGCCCCATG GCTGACTAAT IIIIIIAII TAIGCAGAG GCGGGATTGAG GCGCGATTGAG GCGGGTAAGA GGCGGGGTAC CGACTGATTA AAAAAAATAA ATACGTCTCC GGCT AGAAAGTAGTG AGGAGGCTTT TTTGGAGGCC TAGGCTTTTG CAAAAAGCTG TTAACAGCTT GGCACTGGCC GTCCTTTCATCAC TCCTCCGAAA AAACCTCCGG ATCCGAAAAAC GTTTTTCGAC AATTGTCGAA CCGTGACCGG CAGC	CGGGTAGGGC CGGGTATTCC	L GCCCATCCCG
CGCCCAGTTC CGCCCATTCT CCGCCCCATG GCTGACTART IIIIIIAII TATGCAGAGG CCGCCCAGTTC CGCCCCATTCT CCGCCCCATTG GCTGACTART AAAAAAATAA ATACGTCTCC GGCTGCGGGGTCAAG GCCGGGTAAGA GCCGGGGCTTTTTTTTTT	CCCCTAACTC GGGGATTGAG AGAAGTAGTG	CCCCTAACTC
CGCCATTCT CCGCCCAIG GCIGACIAAI IIIIIIIIII IAIGCAAAG CCGCCATTCT CCGCCCCAIG GCIGACIAAI IIIIIIIIIIIIIIIII	CGCCCAGTTC GCGGGTCAAG AGGAGGCTTT	CGCCCAGTTC
GGCCCCATG GCTGACTAIT ITITITIATI TATGCAGAGG CCGCCCCATG GCTGACTAIT AAAAAAATAA ATACGTCTCC GGCTTAGGCCTTTTTG CAAAAAGCTG TTAACAGCTT GGCACTGGCC GTCGATCCGAAAAAC GTTTTTCGAC AATTGTCGAA CCGTGACCGG CAGC	CGCCCATTCT GCGGGTAAGA TTTGGAGGCC	CGCCCATTCT
CGACTGATTA ADADADATAD ATACGTCTCC GGCT CGACADAGCTG TTANCAGCTT GGCACTGGCC GTCC GTTTTTCGAC AATTGTCGAA CCGTGACCGG CAGC start pUC118	CCGCCCATG GGCGGGGTAC TAGGCTTTTG	CCGCCCCATG
AAAAAATAA ATACGTCTCC GGCT TTAACAGCTT GGCACTGGCC GTCC AATTGTCGAA CCGTGACCGG CAGC	GCTGACTAAT CGACTGATTA CGACTGATTA CAAAAAGCTG	GCTGACTAAT
ATACGTCTCC GGCT GGCACTGGCC GTCC	TTTTTTATT AAAAAATAA TTAACAGCTT TTAACAGCTAA	TTTTTTTATT
GTCG	TATGCAGAGG ATACGTCTCC GGCACTGGCC CCGTGACCGG	TATGCAGAGG
CCCGGCG FTTTTAC FAAAATG	GECTECGGCG GGCTTTTAC GRCGAAAATG	CCGAGGCCGC
GAGCCGGAGA AACGTCGTGA TTGCAGCACT	GAGCCGGAGA AACGTCGTGA TTGCAGCACT	CTCGGCCTCT

- 2101 CTGGGAAAAC CCTGGCGTTA CCCAACTTAA TCGCCTTGCA GCACATCCCC CCTTCGCCAG CTGGCGTAAT AGCGAAGAGG CCCGCACCGA TCGCCCTTCC GACCCTTTIG GGACCGCAAT GGGTTGAATT AGCGGAACGT CGTGTAGGGG GGAAGCGGTC GACCGCATTA TCGCTTCTCC GGGCGTGGCT AGCGGGAAGG
- ~701 CAACAGTTGC GTAGCCTGAA TGGCGAATGG CGCCTGATGC GGTATTTTCT CCTTACGCAT CTGTGCGGTA TTTCACACCG CATACGTCAA AGCAACCATA GTTGTCAACG CATCGGACTT ACCGCTTACC GCGGACTACG CCATAAAAGA GGAATGCGTA GACACGCCAT AAAGTGTGGC GTÀTGCAGTT TCGTTGGTAT
- 2401 2301 GTACGCGCCC TGTAGCGGCG CATTAAGCGC GGCGGGTGTG GTGGTTACGC GCAGCGTGAC CGCTACACTT GCCAGCGCCC TAGCGCCCCGC TTCTTCCCTT CCTTTCTCGC CACGTTCGCC GGCTTTCCCC GTCAAGCTCT AAATCGGGGG CTCCCTTTAG GGTTCCGATT TAGTGCTTTA CGGCACCTCG CATGCGCGGG ACATCGCCGC GTAATTCGCG CCGCCCACAC CACCAATGCG CGTCGCACTG GCGATGTGAA CGGTCGCGGG ATCGCGGGCG AGGAAAGCGA ICCITICGCI
- 2501 ACCCCAAAAA ACTTGATTTG GGTGATGGTT CACGTAGTGG GCCATCGCCC TGATAGACGG TTTTTCGCCC TTTGACGTTG GAGTCCACGT TCTTTAATAG TGGGGTTTTT TGAACTAAAC CCACTACCAA GTGCATCACC CGGTAGCGGG ACTATCTGCC AAAAAGCGGG AAACTGCAAC CTCAGGTGCA AGAAATTATC

AAGAAGGGAA GGAAAGAGCG GTGCAAGCGG CCGAAAGGGG CAGTTCGAGA TTTAGCCCCC GAGGGAAATC CCAAGGCTAA ATCACGAAAT

GCCGTGGAGC

- 2601 TGGACTCTTG TTCCAAACTG GAACAACACT CAACCCTATC TCGGGCTATT CTTTTGATTT ATAAGGGATT TTGCCGATTT CGGCCTATTG GTTAAAAAAT ACCTGAGAAC AAGGTTTGAC CTTGTTGTGA GTTGGGATAG AGCCCGATAA GAAAACTAAA TATTCCCTAA AACGGCTAAA GCCGGATAAC CAATTTTTTA
- 2701 GAGCTGATTT AACAAAAATT TAACGCGAAT TTTAACAAAA TATTAACGTT TACAATTTTA TGGTGCACTC TCAGTACAAT CTGCTCTGAT GCCGCATAGT 201 TAAGCCAACT CCGCTATCGC TACGTGACTG GGTCATGGCT GCGCCCCGAC ACCCGCCAAC ACCCGCTGAC GCGCCTGAC GGGCTTGTCT GCTCCCGGCA ATTCGGTTGA GGCGATAGCG ATGCACTGAC CCAGTACCGA CGCGGGGCTG TGGGCGGTTG TGGGCGACTG CGCGGGACTG CCCGAACAGA CTCGACTAAA TTGTTTTTAA ATTGCGCTTA AAATTGTTTT ATAATTGCAA ATGTTAAAAT ACCACGTGAG AGTCATGTTA GACGAGACTA CGGCGTATC CGAGGGCCGT

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- 2901 TCCGCTTACA GACAAGCTGT GACCGTCTCC GGGAGCTGCA TGTGTCAGAG GTTTTCACCG TCATCACCGA AACGCGCGAG GCAGTATTCT TGAAGACGAA AGGCGAATGT CTGTTCGACA CTGGCAGAGG CCCTCGACGT ACACAGTCTC CAAAAGTGGC AGTAGTGGCT TTGCGCGCGCTC CGTCATAAGA ACTTCTGCTT
- 3001 AGGGCCTCGT GATACGCCTA TTTTTATAGG TTAATGTCAT GATAATAATG GTTTCTTAGA CGTCAGGTGG CACTTTTCGG GGAAATGTGC GCGGAACCCC TCCCGGAGCA CTATGCGGAT AAAAATATCC AATTACAGTA CTATTATTAC CAAAGAATCT GCAGTCCACC GTGAAAAGCC CCTTTACACG CGCCTTGGGG

Figure 5C

- 3101 TATTTGTTTA TTTTTCTAAA TACATTCAAA TATGTATCCG CTCATGAGAC AATAACCCTG ATAAATGCTT CAATAATATT GAAAAAGGAA GAGTATGAGT ATAAACAAAT AAAAAGATTT ATGTAAGTTT ATACATAGGC GAGTACTCTG TTATTGGGAC TATTTACGAA GTTATTATAA CTTTTTCCTT CTCATACTCA
- 3201 ATTCAACATT TCCGTGTCGC CCTTATTCCC TTTTTTGCGG CATTTTGCCT TCCTGTTTTT TAAGTTGTAA AGGCACAGCG GGAATAAGGG AAAAAAACGCC GTAAAAACGGA AGGACAAAAA CGAGTGGGTC GCTCACCCAG AAACGCTGGT GAAAGTAAAA GATGCTGAAG TTTGCGACCA CTTTCATTTT CTACGACTIC
- 3301 3401 TITTAAAGIT CIGCIAIGIG GCGCGGIAIT AICCCGIGAI GACGCCGGGC AAGAGCAACI CGGICGCCGC AIACACIAIT CICAGAAIGA CIIGGIIGAG ATCAGTTGGG TAGTCAACCC ACGTGCTCAC CCAATGTAGC TTGACCTAGA GTTGTCGCCA TTCTAGGAAC TCTCAAAAGC TGCACGAGTG GGTTACATCG AACTGGATCT CAACAGCGGT AAGATCCTTG AGAGTTTTCG CCCCGAAGAA CGTTTTCCAA GGGGCTTCTT GCAAAAGGTT ACTACTCGTG TGATGAGCAC
- 10, TACTCACCAG AAAATTTCAA TCACAGAAAA GCATCTTACG GATGGCATGA CAGTAAGAGA ATTATGCAGT GCTGCCATAA CCATGAGTGA TAACACTGCG GCCAACTTAC GACGATACAC CGCGCCATAA TAGGGCACTA CTGCGGCCCG TTCTCGTTGA GCCAGCGGCG TATGTGATAA GAGTCTTACT GAACCAACTC CGACGGTATT GGTACTCACT ATTGTGACGC CGGTTGAATG

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- 3601 TTCTGACAAC GATCGGAGGA CCGAAGGAGC TAACCGCTTT TTTGCACAAC ATGAGTGGTC AGTGTCTTTT CGTAGAATGC CTACCGTACT GTCATTCTCT TAATACGTCA AAGACTGTTG CTAGCCTCCT GGCTTCCTCG ATTGGCGAAA AAACGTGTTG TACCCCCTAG TACATTGAGC GGAACTAGCA ACCCTTGGCC ATGGGGGATC ATGTAACTCG CCTTGATCGT TGGGAACCGG TCGACTTACT AGCTGAATGA
- 3701 AGCCATACCA AACGACGAGC GTGACACCAC GATGCCAGCA GCAATGGCAA CAACGTTGCG CAAACTATTA ACTGGCGAAC TACTTACTCT TCGGTATGGT TIGCIGCICG CACIGIGGIG CIACGGICGI CGITACCGII GIIGCAACGC GTTTGATAAT TGACCGCTTG ATGAATGAGA TCGAAGGGCC AGCTTCCCGG
- 3801 CAACAATTAA TAGACTGGAT GGAGGCGGAT AAAGTTGCAG GACCACTTCT GCGCTCGGCC CTTCCGGCTG GCTGGTTTAT TGCTGATAAA TCTGGAGCCG GTTGTTAATT ATCTGACCTA CCTCCGCCTA TTTCAACGTC CTGGTGAAGA CGCGAGCCGG GAAGGCCGAC CGACCAAATA ACGACTATTT
- 3901 GTGAGCGTGG GTCTCGCGGT ATCATTGCAG CACTGGGGCC AGATGGTAAG CCCTCCCGTA TCGTAGTTAT CTACACGACG GGGAGTCAGG CAACTATGGA CACTCGCACC CAGAGCGCCA TAGTAACGTC GTGACCCCGG TCTACCATTC GGGAGGGCAT AGCATCAATA GATGTGCTGC CCCTCAGTCC GTTGATACCT
- ئز TGAACGAAAT AGACAGATCG CTGAGATAGG ACTIGCTITA TCTGTCTAGC GACTCTATCC ACGGAGTGAC TAATTCGTAA CCATTGACAG TCTGGTTCAA ATGAGTATAT ATGAAATCTA TGCCTCACTG ATTAAGCATT GGTAACTGTC AGACCAAGTT TACTCATATA TACTTTAGAT TGATTTAAAA ACTAAATTT

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- 4101 CITCATITIT AAITTAAAAG GAICIAGGIG AAGAICCITI IIGAIAATCI CAIGACCAAA AICCCITAAC GIGAGITITC GIICCACIGA GCGICAGACC GAAGTAAAAA TTAAATTTTC CTAGATCCAC TTCTAGGAAA AACTATTAGA GTACTGGTTT TAGGGAATTG CACTCAAAAG CAAGGTGACT CGCAGTCTGG
- 4201 CCGTAGAAAA GATCAAAAGGA TCTTCTTGAG ATCCTTTTTT TCTGCGCGTA ATCTGCTGCT TGCAAACAAA AAAACCACCG CTACCAGCGG TGGTTTGTTT GGCATCTTT CTAGTTTCCT AGAAGAACTC TAGGAAAAA AGACGCGCAT TAGACGACGA ACGTTTGTTT TTTTGGTGGC GATGGTCGCC ACCAAACAAA
- 4301 GCCGGATCAA GAGCTACCAA CTCTTTTTCC GAAGGTAACT GGCTTCAGCA GAGCGCAGAT ACCAAATACT GTCCTTCTAG TGTAGCCGTA GTTAGGCCAC CGGCCTAGTT CTCGATGGTT GAGAAAAAGG CTTCCATTGA CCGAAGTCGT CTCGCGTCTA TGGTTTATGA CAGGAAGATC ACATCGGCAT CAATCCGGTG

Figure 5D

- 4401 CACTTCAAGA ACTCTGTAGC ACCGCCTACA TACCTCGCTC TGCTAATCCT GTTACCAGTG GCTGCTGCCA GTGGCGATAA GTCGTGTCTT ACCGGGTTGG GTGAAGTTCT TGAGACATCG TGGCGGATGT ATGGAGCGAG ACGATTAGGA CAATGGTCAC CGACGACGGT CACCGCTATT CAGCACAGAA TGGCCCAACC
- 4501 ACTCAAGACG ATAGTTACCG GATAAGGCGC AGCGGTCGGG TGAGTTCTGC TATCAATGGC CTATTCCGCG TCGCCAGCCC GACTTGCCCC CCAAGCACGT GTGTCGGGTC GAACCTCGCT TGCTGGATGT GGCTTGACTC CTGAACGGGG GGTTCGTGCA CACAGCCCAG CTTGGAGCGA ACGACCTACA CCGAACTGAG
- 4601 ATACCTACAG CGTGAGCATT GAGAAAGCGC CACGCTTCCC GAAGGGAGAA AGGCGGACAG GTATCCGGTA AGCGGCAGGG TCGGAACAGG TATGGATGTC GCACTCGTAA CTCTTTCGCG GTGCGAAGGG CTTCCCTCTT TCCGCCTGTC CATAGGCCAT TCGCCGTCCC AGCCTTGTCC TCTCGCGTGC **AGAGCGCACG**
- 4701 AGGGAGCTIC CAGGGGGAAA CGCCIGGTAI CITTATAGIC CIGICGGGIT ICGCCACCIC IGACTIGAGC GICGATITIT GIGATGCICG ICAGGGGGGG TCCCTCGAAG GICCCCCTII GCGGACCATA GAAATATCAG GACAGCCCAA AGCGGTGGAG ACTGAACTCG CAGCTAAAAA CACTACGAGC AGTCCCCCCG
- 10 GGAGCCTATG GAAAAACGCC AGCAACGCGG CCTTTTTACG GTTCCTGGCC CCTCGGATAC CTTTTTGCGG TCGTTGCGCC GGAAAAATGC CAAGGACCGG AAAACGACCG TTTTGCTGGC CTTTTGCTCA CATGTTCTTT CCTGCGTTAT CCCCTGATTC GAAAACGAGT GTACAAGAAA GGACGCAATA GGGGACTAAG

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- 4901 TGTGGATAAC CGTATTACCG CCTTTGAGTG ACACCTATTG GCATAATGGC GGAAACTCAC TCGACTATGG CGAGCGGCGT CGGCTTGCTG GCTCGCGTCG CTCAGTCACT CGCTCCTTCG AGCTGATACC GCTCGCCGCA GCCGAACGAC CGAGCGCAGC GAGTCAGTGA GCGAGGAAGC GGAAGAGCGC CCTTCTCGCG
- 5101 TTAATGTGAG TTACCTCACT CATTAGGCAC CCCAGGCTTT ACACTTTATG CTTCCGGCTC GTATGTTGTG TGGAATTGTG AGCGGATAAC AATTTCACAC AATTACACTC AATGGAGTGA GTAATCCGTG GGGTCCGAAA TGTGAAATAC GAAGGCCGAG CATACAACAC ACCTTAACAC TCGCCTATTG TTAAAGTGTG
- 5201 AGGAAACAGC TATGACCATG ATTACGAATT AATTCGAGCT CGCCCGACAT TGATTATTGA CTAGTTATTA ATAGTAATCA ATTACGGGGT CATTAGTTCA TCCTTTGTCG ATACTGGTAC TAATGCTTAA TTAAGCTCGA GCGGGCTGTA ACTAATAACT GATCAATAAT TATCATTAGT TAATGCCCCA GTAATCAAGT from pPMLCMV beginning to HindIII, enhancers and promoter
- ,01 TAGCCCATAT ATGGAGTTCC GCGTTACATA ACTTACGGTA AATGGCCCGC CTGGCTGACC GCCCAACGAC CCCCGCCCAT TGACGTCAAT AATGACGTAT ATCGGGTATA TACCTCAAGG CGCAATGTAT TGAATGCCAT TTACCGGGCG GACCGACTGG CGGGTTGCTG GGGGCGGGTA ACTGCAGTTA TTACTGCATA
- 5401 GTTCCCATAG CAAGGGTATC ATTGCGGTTA TCCCTGAAAG GTAACTGCAG TTACCCACCT CATAAATGCC ATTTGACGGG TGAACCGTCA TAACGCCAAT AGGGACTTTC CATTGACGTC AATGGGTGGA GTATTTACGG TAAACTGCCC ACTTGGCAGT ACATCAAGTG TATCATATGC TGTAGTTCAC ATAGTATACG
- 5501 CAAGTACGCC CCCTATTGAC GTCAATGACG GTAAATGGCC CGCCTGGCAT TATGCCCCAGT ACATGACCTT ATGGGACTTT CCTACTTGGC AGTACATCTA GTTCATGCGG GGGATAACTG CAGTTACTGC CATTTACCGG GCGGACCGTA ATACGGGTCA TGTACTGGAA TACCCTGAAA GGATGAACCG TCATGTAGAT

Figure 5E

5601 CGTATTAGTC ATCGCTATTA CCATGGTGAT GCGGTTTTGG CAGTACATCA ATGGGCGTGG ATAGCGGTTT GACTCACGGG GATTTCCAAG TCTCCACCCC GCATAATCAG TAGCGATAAT GGTACCACTA CGCCAAAACC GTCATGTAGT TACCCGCACC TATCGCCAAA CTGAGTGCCC CTAAAGGTTC AGAGGTGGGG

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- 5701 ATTGACGTCA ATGGGAGTTT GTTTTGGCAC CAAAATCAAC GGGACTTTCC AAAATGTCGT AACAACTCCG CCCCATTGAC GCAAATGGGC TAACTGCAGT TACCCTCAAA CAAAACCGTG GTTTTAGTTG CCCTGAAAGG TTTTACAGCA TTGTTGAGGC GGGGTAACTG CGTTTACCCG CCATCCGCAC GGTAGGCGTG
- 5801 TACGGTGGGA GGTCTATATA AGCAGAGCTC GTTTAGTGAA CCGTCAGATC GCCTGGAGAC GCCATCCACG CTGTTTTGAC CTCCATAGAA GACACCGGGA ATGCCACCCT CCAGATATAT TCGTCTCGAG CAAATCACTT GGCAGTCTAG CGGACCTCTG CGGTAGGTGC GACAAAACTG GAGGTATCTT CTGTGGCCCT
- 5901 CCGATCCAGC CTCCGCGGCC GGGAACGGTG CATTGGAACG CGGATTCCCC GTGCCAAGAG TGACGTAAGT ACCGCCTATA GAGTCTATAG GCCCACCCC 01 TIGGCTCGTT AGAACGCGGC TACAATTAAT ACATAACCTT AIGTAICATA CACATACGAI TIAGGIGACA CIATAGAATA ACAICCACTT TGCCTTICIC AACCGAGCAA TCTTGCGCCG ATGTTAATTA TGTATTGGAA TACATAGTAT GTGTATGCTA AATCCACTGT GATATCTTAT TGTAGGTGAA ACGGAAAGAG GGCTAGGTCG GAGGCGCCGG CCCTTGCCAC GTAACCTTGC GCCTAAGGGG CACGGTTCTC ACTGCATTCA TGGCGGATAT CTCAGATATC CGGGTGGGGG sp6 promoter sp6 RNA start
- 6101 TCCACAGGTG TCCACTCCCA GGTCCAACTG CAGGCCATGG CGGCCATCGA TT AGGTGTCCAC AGGTGAGGGT CCAGGTTGAC GTCCGGTACC GCCGGTAGCT AA cloning linker (SEQ ID NO.25)

Figure 5F

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